

## CLAIMS

What is claimed is:

1. A coating composition for the skin-contacting surface of elastomeric articles comprising:
  - a) at least one polyhydric alcohol moisturizer; and
  - b) at least one alphahydroxy lactone;wherein said composition is water-soluble and hydratable upon contact with skin.
2. The coating composition according to claim 1 wherein said polyhydric alcohol moisturizer comprises pantothenol in provitamin B form.
3. The coating composition according to claim 1 wherein said alphahydroxy lactone is gluconolactone.
4. The coating composition according to claim 3 wherein said gluconolactone is D-glucono-1,5-lactone.
5. The coating composition according to claim 1 wherein said polyhydric alcohol moisturizer comprises glycerin.
6. The coating composition according to claim 1 wherein said polyhydric alcohol moisturizer comprises sorbitol.
7. The coating composition according to claim 1 wherein said coating composition further comprises a water-soluble film-forming polymer.
8. The coating composition according to claim 7 wherein said water-soluble film-forming polymer comprises chitosan.
9. The coating composition according to claim 1 further comprising a hydration promoter.

10. The coating composition according to claim 1 further comprising a plasticizer.
11. The coating composition according to claim 1, comprising:
  - a) water-soluble polyhydric alcohol moisturizer present in an amount up to about 3.00% by weight of the total composition, said polyhydric alcohol moisturizer selected from the group consisting of glycerin and sorbitol, and combinations thereof;
  - b) pantothenol present in an amount ranging from about 0.10% to about 3.00% by weight of the total composition;
  - c) alphahydroxy lactone present in an amount ranging from about 0.10% to about 3.00% by weight of the total composition.
12. The coating composition according to claim 10 further comprising a water-soluble film-forming polymer present in an amount up to about 1.00% by weight of the total composition.
13. The coating composition according to claim 12 wherein said water-soluble film-forming polymer is chitosan.
14. The coating composition according to claim 11, comprising:
  - a) a combination of glycerin and sorbitol each present in an amount ranging from about 0.10% to about 1.50% of the total weight of the composition;
  - b) pantothenol present in an amount ranging from about 0.30% to about 0.50% by weight of the total composition;
  - c) gluconolactone present in an amount ranging from about 0.10% to about 0.50% by weight of the total composition.

15. The coating composition according to claim 14 further comprising a hydration promoter.
16. The coating composition according to claim 1 for the skin-contacting surface of an examination glove, said coating composition comprising:
  - glycerol in an amount of about 0.10% by weight of the total composition;
  - sorbitol in an amount of about 0.30% by weight of the total composition;
  - pantothenol in an amount of about 0.20% by weight of the total composition;
  - gluconolactone in an amount of about 0.20% by weight of the total composition.
17. The coating composition according to claim claim 1 for the skin-contacting surface of a surgical glove, said coating composition comprising:
  - glycerol in an amount of about 0.25% by weight of the total composition;
  - sorbitol in an amount of about 0.75% by weight of the total composition;
  - pantothenol in an amount of about 0.50% by weight of the total composition;
  - gluconolactone in an amount of about 0.25% by weight of the total composition.
18. An elastomeric article comprising a coating composition on the skin-contacting surface, said coating composition being in dry state and comprising:
  - a) at least one polyhydric alcohol moisturizer; and
  - b) at least one alphahydroxy lactone;wherein said composition is water-soluble and hydratable upon contact with skin.
19. The elastomeric article according to claim 18 wherein the elastomer is composed of natural rubber.
20. The elastomeric article according to claim 18 wherein the elastomer is composed of synthetic rubber.

21. The elastomeric article according to claim 20 wherein the synthetic rubber is nitrile rubber.
22. The elastomeric article according to claim 20 wherein the synthetic rubber is polyisoprene.
23. The elastomeric article according to claim 18 wherein said article is an examination glove.
24. The elastomeric article according to claim 18 wherein said article is a surgeon's glove.
25. The elastomeric article according to claim 18 wherein said polyhydric alcohol moisturizer comprises pantothenol in provitamin B form.
26. The elastomeric article according to claim 18 wherein said alphahydroxy lactone is gluconolactone.
27. The elastomeric article according to claim 26 wherein said gluconolactone is D-glucono-1,5-lactone.
28. The elastomeric article according to claim 18 wherein said polyhydric alcohol moisturizer comprises pantothenol in combination with at least one of glycerin and sorbitol.
29. The elastomeric article according to claim 18 wherein said coating composition further comprises a water-soluble film-forming polymer.
30. The elastomeric article according to claim 29 wherein said water-soluble film-forming polymer comprises chitosan.
31. The elastomeric article according to claim 18 further comprising a hydration promoter.

32. The elastomeric article according to claim 18 further comprising a plasticizer.
33. The elastomeric article according to claim 18 wherein said coating composition comprises:
- a) water-soluble polyhydric alcohol moisturizer present in an amount up to about 3.00% by weight of the total composition; and
  - b) alphahydroxy lactone present in an amount ranging from about 0.10% to about 3.00% by weight of the total composition.
34. An examination glove comprising a coating composition on the skin-contacting surface, said coating composition being in the dry state and comprising:
- c) at least one polyhydric alcohol moisturizer; and
  - d) at least one alphahydroxy lactone;
- wherein said composition is water-soluble and hydratable upon contact with skin.
35. A surgeon's glove comprising a coating composition on the skin-contacting surface, said coating composition being in the dry state and comprising:
- e) at least one polyhydric alcohol moisturizer; and
  - f) at least one alphahydroxy lactone;
- wherein said composition is water-soluble and hydratable upon contact with skin.
36. The surgeon's glove according to claim 35, wherein said coating composition further comprises chitosan.
37. A process for making a skin-contacting elastomeric article providing enhanced therapeutic properties to the skin of the wearer, said process comprising the steps of:

- a) applying a coating composition to the skin-contacting surface of the elastomeric article, said coating composition comprising:
    - i) at least one polyhydric alcohol moisturizer; and
    - ii) at least one alphahydroxy lactone;wherein said composition is water-soluble and hydratable upon contact with skin; and
  - b) drying said composition on said skin-contacting surface.
38. The process according to claim 37 wherein the elastomeric article is a glove.
39. The process according to claim 38 wherein the glove is an examination glove.
40. The process according to claim 39 wherein the coating composition is applied to the glove using the tumbling method.
41. The process according to claim 38 wherein the glove is a surgical glove.
42. The process according to claim 41 wherein the coating composition is applied to the glove using the spray method.
43. A method of therapeutically treating the skin on the hands of an individual in need of said treatment, said method comprising the steps of:
- a) providing an elastomeric glove comprising a dry-state coating composition on the skin-contacting surface of said glove, said coating composition comprising:
    - i) at least one polyhydric alcohol moisturizer; and
    - ii) at least one alphahydroxy lactone;wherein said composition is water-soluble and hydratable upon contact with skin;

- b) donning said glove on the hand;
  - c) wearing the glove for a period of time sufficient to permit hydration and transfer of said coating composition onto the skin surface of the hands;  
and
  - d) subsequently removing said glove from the hand.
- 44. The method according to claim 43 wherein said therapeutic treatment comprises enhanced skin moisturization.
  - 45. The method according to claim 43 wherein said therapeutic treatment comprises relatively reduced skin flaking.
  - 46. The method according to claim 43 wherein said therapeutic treatment comprises relatively reduced skin redness and irritation.
  - 47. The method according to claim 43 wherein said therapeutic treatment comprises enhanced skin softness.
  - 48. The method according to claim 43 wherein said therapeutic treatment comprises enhanced skin firmness and elasticity.
  - 49. The method according to claim 43 wherein said therapeutic treatment comprises relatively reduced appearance of visible wrinkles.
  - 50. A coating composition for the skin-contacting surface of elastomeric articles comprising at least one polyhydric alcohol moisturizer;  
wherein said composition is water-soluble and hydratable upon contact with skin.